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REMARKS

The application has been reviewed in light of the final Office Action dated February 5, 2007. Claims 1-8 are pending in this application. By the present Amendment, claims 1 and 4 have been amended to place them in better form for reconsideration, without narrowing a scope of the claimed subject matter.

Claims 1-6 were rejected under 35 U.S.C. § 102(e) as purportedly anticipated by Schwartz (US 2003/0219166 A1).

Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that independent claims 1 and 8 are patentable over the cited art, for at least the following reasons.

For example, Schwartz, contrary to the contention in the Office Action, does not teach or suggest adjusting the size of the coded data such that the size of the coded data falls within an acceptable range, which includes the target size of the coded data set by the setting step, by subsequently discarding a portion of the coded data in a least significant order from the second memory based on the size of the coded data portion corresponding to each coding pass stored in the first memory. Each of independent claims 1 and 4 of the present application addresses these features, as well as additional features.

The Office Action cites Schwartz, [0181], Schwartz, [0080], Schwartz, [0170], and Schwartz, [0153].

Schwartz, [0181], which was cited in the Office Action, states as follows:

[0181] *One of the coefficient values may be modified to be either a predetermined closeness to another coefficient value. The closeness may be determined by some threshold. The threshold may be user set or adaptive based on some criteria.* The threshold could be different based on the subband and, perhaps, on

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the persistence of the particular value (number of frames that this coefficient is close). In one embodiment, the coefficient value is set equal to the other coefficient value. In alternative embodiments, the coefficient is set to be within the quantization bin size of the other coefficient value or twice the quantization bin size.

Thus, the coefficients can be modified in order to obtain a predetermined closeness, and as proposed in Schwartz, [0178] (which states in relevant part as follows), such modifications are performed to reduce flicker in the motion JPEG:

[0178] ... in order to reduce flicker in motion JPEG, coefficient values are modified (quantized) based on their relationship with each other with respect to a threshold. ...

Schwartz simply does not teach or suggest that the coefficients are adjusted such that the size of the coded falls within an acceptable range.

Schwartz, [0080], which states as follows, merely proposes that using a single memory organization is preferable over adapting the memory organization according to tile size:

[0080] In some applications, *adapting the memory organization to the tile height is inconvenient. A single fixed memory organization can be used.* Tile sizes smaller than 128×128 typically result in bad compression performance, so would typically not be used. While tile sizes bigger than $1 \text{ K} \times 1 \text{ K}$ can be used for very large images, this does not significantly improve compression and the large amount of memory required would typically be burdensome. Therefore, assuming a tile height between 128 and 1024 inclusive and using in-place memory for 3 levels of the transform is a good heuristic.

Although Schwartz, [0080] proposes a heuristic for selecting the single memory configuration, it simply does not teach or suggest adjusting the size of the coded data. It should be noted that tiles represent subsets of the coded data, and the size of the tiles can be desirably selected, but such tile size does not affect the size of the coded data as a whole.

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Schwartz, [0170], which states as follows, proposes that useless tile-parts can be appropriated marked or designated:

[0170] Note that if there are subsequent tile-parts that depend on the data in the portion of the codestream that is being edited, these *tile-parts may become useless in the codestream. An indication of this useless data may be noted to the decoder by one of several methods. These methods involve inserting or modifying information in the codestream to indicate the presence and/or location of the useless data.* In one embodiment, the application uses a status buffer to indicate that the data in tile-parts subsequent to an edited tile-part may be useless. The status buffer may be in workspace memory and describes dependencies between packets. If an earlier packet is altered, the subsequent packets cannot be decoded as is. These subsequent packets must be edited accordingly or eliminated. In another embodiment, *such an indication may be made by zeroing out the data section of those tile-parts and/or creating a PPT marker segment that denotes no data.*

However, the objective of such designation is to avoid unnecessary processing. Schwartz does not teach or suggest that the useless data is to be eliminated such that the size of the coded data falls within an acceptable range which includes a set target size.

Further, Schwartz simply does not teach or suggest adjusting the size of the coded data by discarding a portion of the coded data in a least significant order. Schwartz, [0153] merely shows the data quantity for different layers, when layers are used in the encoding.

Applicant finds no teaching or suggestion by the cited art, however, of adjusting the size of the coded data such that the size of the coded data falls within an acceptable range, which includes the target size of the coded data set by the setting step, by subsequently discarding a portion of the coded data in a least significant order from the second memory based on the size of the coded data portion corresponding to each coding pass stored in the first memory, as provided by the subject matter of independent claim 1.

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In addition, it should be noted that this application and the invention claimed in this application are assigned to Ricoh Company, Ltd, Tokyo, Japan. The assignment of this application to Ricoh Company, Ltd, Tokyo, Japan has been recorded by the USPTO at Reel 15145, Frame 0080.

Schwartz is a publication of U.S. application Serial No. 09/800,934, filed March 6, 2001, now U.S. Patent No. 7,062,103, which is a divisional of U.S. application Serial No. 09/784,928, filed February 15, 2001, now U.S. Patent No. 6,898,323. U.S. applications Serial Nos. 09/800,934 and 09/784,928 are assigned, like this application, to Ricoh Company, Ltd, Tokyo, Japan. The assignment of U.S. application Serial No. 09/800,934 and 09/784,928 to Ricoh Company, Ltd, Tokyo, Japan was recorded by the USPTO at Reel 12088, Frame 0193. Therefore, in accordance with 35 U.S.C. § 103(c), Schwartz does not preclude patentability of the invention claimed in this application under 35 U.S.C. § 103.

Independent claim 4 is patentably distinct from the cited art for at least similar reasons.

Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claims 1 and 4, and the claims depending therefrom, are patentable over the cited art.

In view of the remarks hereinabove, Applicant submits that the application is now in condition for allowance, and earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such petition. The Office is hereby authorized to charge any fees that are required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

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If a telephone interview could advance the prosecution of this application, the Examiner
is respectfully requested to call the undersigned attorney.

Respectfully submitted,


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